



DEPARTMENT OF DEFENSE

Office of the Secretary

[Transmittal No. 21-40]

Arms Sales Notification

AGENCY: Defense Security Cooperation Agency, Department of Defense (DoD).

ACTION: Arms sales notice.

SUMMARY: The DoD is publishing the unclassified text of an arms sales notification.

FOR FURTHER INFORMATION CONTACT: Neil Hedlund at neil.g.hedlund.civ@mail.mil
or (703) 697-9214.

SUPPLEMENTARY INFORMATION: This 36(b)(1) arms sales notification is published to
fulfill the requirements of section 155 of Public Law 104-164 dated July 21, 1996. The following is
a copy of a letter to the Speaker of the House of Representatives, Transmittal 21-40 with attached
Policy Justification and Sensitivity of Technology.

Dated: January 31, 2023.

Aaron T. Siegel,

Alternate OSD Federal Register Liaison Officer,

Department of Defense.



DEFENSE SECURITY COOPERATION AGENCY
201 12TH STREET SOUTH, SUITE 101
ARLINGTON, VA 22202-5408

April 29, 2021

The Honorable Nancy Pelosi
Speaker of the House
U.S. House of Representatives
H-209, The Capitol
Washington, DC 20515

Dear Madam Speaker:

Pursuant to the reporting requirements of Section 36(b)(1) of the Arms Export Control Act, as amended, we are forwarding herewith Transmittal No. 21-40, concerning the Army's proposed Letter(s) of Offer and Acceptance to the Government of Australia for defense articles and services estimated to cost \$1.685 billion. After this letter is delivered to your office, we plan to issue a news release to notify the public of this proposed sale.

Sincerely,

A handwritten signature in black ink, reading "Heidi H. Grant", is positioned above the printed name.

Heidi H. Grant
Director

Enclosures:

1. Transmittal
2. Policy Justification
3. Sensitivity of Technology

Notice of Proposed Issuance of Letter of Offer
Pursuant to Section 36(b)(1)
of the Arms Export Control Act, as amended

- (i) Prospective Purchaser: Government of Australia
- (ii) Total Estimated Value:
- | | |
|--------------------------|------------------------|
| Major Defense Equipment* | \$.500 billion |
| Other | <u>\$1.185 billion</u> |
| TOTAL | \$1.685 billion |
- (iii) Description and Quantity or Quantities of Articles or Services under consideration for Purchase:

Major Defense Equipment (MDE):

One hundred sixty (160) M1A1 Tank structures/hulls provided from stock in order to produce the following end items and spares:

Seventy-five (75) M1A2 SEPv3 Abrams Main Battle Tanks

Twenty-nine (29) M1150 Assault Breacher Vehicles

Eighteen (18) M1074 Joint Assault Bridges

Six (6) M88A2 Hercules Combat Recovery Vehicles

One hundred twenty-two (122) AGT1500 Gas Turbine Engines

Non-MDE:

Also included is development of a unique armor package, Common Remotely Operated Weapon Station Low Profile (CROWS-LP), Driver's Vision Enhancer, mission equipment, special tools and test equipment, ground support equipment, system and engine spare parts, technical data, publications, Modification Work Orders/Engineering Change Proposals (MWO/ECPs), U.S. Government and contractor technical and logistics assistance, quality assurance teams, transportation services, program management, New Equipment Training (NET); and other related elements of logistical and program support.

- (iv) Military Department: Army (AT-B-ULU, AT-B-ULX, AT-B-UKQ, AT-B-UKX)
- (v) Prior Related Cases, if any: AT-B-ZZH, AT-B-UHQ, AT-B-UIZ, AT-B-UIG
- (vi) Sales Commission, Fee, etc., Paid, Offered, or Agreed to be Paid: None
- (vii) Sensitivity of Technology Contained in the Defense Article or Defense Services Proposed to be Sold: See Attached Annex.
- (viii) Date Report Delivered to Congress: **April 29, 2021**

*As defined in Section 47(6) of the Arms Export Control Act.

POLICY JUSTIFICATION

Australia – Heavy Armored Combat Systems

The Government of Australia has requested to buy one hundred sixty (160) M1A1 Tank structures/hulls provided from stock in order to produce the following end items and spares: seventy-five (75) M1A2 SEPv3 Abrams Main Battle Tanks; twenty-nine (29) M1150 Assault Breacher Vehicles; eighteen (18) M1074 Joint Assault Bridges; six (6) M88A2 Hercules Combat Recovery Vehicles; and one hundred twenty-two (122) AGT1500 gas turbine engines. Also included is development of a unique armor package, Common Remotely Operated Weapon Station Low Profile (CROWS-LP), Driver's Vision Enhancer, mission equipment, special tools and test equipment, ground support equipment, system and engine spare parts, technical data, publications, Modification Work Orders/Engineering Change Proposals (MWO/ECPs), U.S. Government and contractor technical and logistics assistance, quality assurance teams, transportation services, program management, New Equipment Training (NET); and other related elements of logistical and program support. The total estimated value is \$1.685 billion.

This proposed sale will support the foreign policy and national security objectives of the United States. Australia is one of our most important allies in the Western Pacific. The strategic location of this political and economic power contributes significantly to ensuring peace and economic stability in the region. It is vital to the U.S. national interest to assist our ally in developing and maintaining a strong and ready self-defense capability.

The proposed sale improves Australia's capability to meet current and future threats by enhancing the lethality, survivability, and interoperability of the Australian Army. Australia will use the enhanced capability to strengthen its homeland defense and deter regional threats. The M1A2 SEPv3 Main Battle Tanks will upgrade the current Australian fleet of M1A1 SA tanks with no changes to Royal Australian Armoured Corps force structure. Additional M88A2 vehicles provide de-processing and combat vehicle recovery support for the Australian tank fleet. The M1150 Assault Breacher Vehicles (ABVs) and M1074 Joint Assault Bridges (JABs) will be a new capability for the Royal Australian Engineers, bringing under-armor bridging and breaching capability, increasing the effectiveness and survivability of Australian Combat Engineers and providing increased mobility for the armored fleet. Australia will have no difficulty absorbing this equipment into its armed forces.

The proposed sale of this equipment and support will not alter the basic military balance in the region.

The principal contractors will be General Dynamics Land Systems, Sterling Heights, MI; BAE Systems, York, PA; Leonardo DRS, Arlington, VA; and Honeywell Aerospace, Phoenix, AZ. The purchaser typically requests offsets. Any offset agreement will be defined in negotiations between the purchaser and the contractor(s).

Implementation of this sale will require the assignment of approximately 10 additional U.S. or contractor representatives to Australia.

There will be no adverse impact on U.S. defense readiness as a result of this proposed sale.

Transmittal No. 21-40

Notice of Proposed Issuance of Letter of Offer and Acceptance
Pursuant to Section 36(b)(1)
of the Arms Export Control Act

Annex
Item No. vii

(vii) Sensitivity of Technology:

1. M1A2 System Enhancement Package 3 (SE Pv3) Main Battle Tank. The M1A2 Abrams is a third-generation American main battle tank, produced by General Dynamics Land Systems. The M1A2 SE Pv3 features include a multi-fuel turbine engine, composite armor, an advanced computer fire control system, separate ammunition storage in a blow-out compartment, and 120mm main gun. Extensive improvements have been implemented to the latest M1A2 SE Pv3 configuration. These include improved digital systems, increased electrical power margin to support demands of future technologies, line replaceable modules (LRM) to reduce operational support costs, ammunition data link to support new tank main gun rounds, and an auxiliary power unit (APU). The M1A2 Thermal Imaging System (TIS) and M1A2 Commander's Independent Thermal Viewer (CITV) constitute the system's target acquisition system, which, when operated with other tank systems gives the tank crew a substantial battlefield advantage. The TIS provides the M1A2 crew with the ability to effectively aim and fire the tank main armament system under a broad range of adverse battlefield conditions. The TIS can be operated and viewed by the tank gunner or tank commander, and is the main sighting system for the tanks' main gun (cannon.) The CITV provides the same target acquisition system as the TIS, but provides the tank commander a separate system that can be controlled and operated independent of the TIS. Australia has commissioned the development and production of bespoke Turret Front armor to be used in their M1A2SE Pv3. This armor is being developed by the USG in consultation and coordination with the CoA to ensure that it is optimized to their perceived threat matrix.
2. The Abrams 120mm main gun system is composed of a 120 millimeter smoothbore gun manufactured at Watervliet Arsenal. Gun production and design technology are generally well known.
3. The use of a gas turbine propulsion system in the M1A2 is a unique application of armored vehicle power pack technology. The hardware is composed of the AGT-1500 engine and transmission, and while the system is not a critical military technology the manufacturing processes associated with the turbine blades, recuperator, bearings and shafts, and hydrostatic pump and motor are proprietary and therefore commercially competition sensitive.
4. The Common Remotely Operated Weapon Station – Low Profile (CROWS-LP) is the M1A2 commander's weapon station, and allows for under-armor operation of the weapons on the system including the M2HB, M2A1, M240B and M240 machine guns. The CROWS-LP is an updated version of the M153A2 CROWS, is approximately 10 inches shorter, and offers increased visibility to the user. The fire control system of the CROWS-LP allows for "first-burst" on target capability from stationary and moving platforms. The CROWS-LP ingrates a day camera (VIM-C), thermal camera (TIM 1500) and laser range finder (STORM/STORM-PI).
5. The Driver Vision Enhancer – Abrams (DVE-A) and Rear View Sensor System (RVSS) are un-cooled thermal imaging systems developed for use while driving combat vehicles and tactical wheeled vehicles. The DVE-A provides night vision capability for the Abrams tank driver. RVSS provides a rear view camera for the Abrams tank. DVE-A and RVSS allow for tactical vehicle movement in support of operational missions in all environmental conditions (day/night and all weather) and provides enhanced driving capability during limited visibility conditions.
6. M88A2 Heavy Equipment Recovery Vehicle. M88A2 Heavy Equipment Recovery Combat Utility Lifting Extraction System (HERCULES) Combat Recovery Vehicle is to

extricate combat vehicles that have become bogged down or entangled, and to repair or replace damaged parts in fighting vehicles while under fire. The 70-ton M88A2 Recovery Combat Vehicle is standard equipment to de-process, recover, and sustain the Abrams M1 Tank.

7. The M88A2's AVDS-1790-8CR is a unique modification to the standard piston engine family in the M60 series and the base M88A1. Manufacturing processes associated with the production of turbochargers, fuel injection system, and cylinders are proprietary and therefore commercially competition sensitive.

8. The Driver's Vision Enhancer – Combat Vehicle M88 is an un-cooled thermal imaging system developed for use on combat and tactical wheeled vehicles. It allows for tactical vehicle movement in all environmental and limited visibility conditions. The DVE-CV for M88 vehicle is a platform-mounted night vision device that requires external power supply and is integrated into the vehicle. The M88 is also equipped with CROWS-LP (M153A2E1), described above for the Abrams.

9. The Assault Breacher Vehicle (ABV). The ABV is a highly mobile and heavily armored minefield and complex obstacle breaching system. It consists of an M1 Abrams tank hull, a unique turret with two Linear Demolition Charge Systems (employing two Mine Clearing Line Charges (MCLC) and rockets), a Lane Marking System (LMS), Integrated Vision System, and a High Lift Adapter that interchangeably mounts mine plows, rollers, and dozer blades.

10. The Driver Vision Enhancer. Abrams (DVE-A) and Assault Breacher Vehicle Integrated Vision System (IVS) are un-cooled thermal imaging systems developed for use while driving combat vehicles and tactical wheeled vehicles. The DVE-A provides night vision capability for the ABV tank driver. IVS provides a rear view camera for the ABV. The ABV is equipped with the AGT 1500 Gas Turbine Propulsion System and the CROWS-LP described in the Abrams and M88A2 sections above.

11. The ABV is equipped with a Magnetic Signature Duplicator which mounts to the forward engineering attachments. It generates a magnetic perturbation which causes magnetically fused mines to detonate well forward of the vehicle through the use of an emitted magnetic field.

12. The Joint Assault Bridge (JAB) provides Army Engineer units supporting Armored Brigade Combat Teams with a survivable, deployable and sustainable heavy-assault bridging capability. The JAB provides a gap-crossing capability to cross wet or dry gaps to provide freedom of maneuver on the battlefield and keep pace with Abrams Brigade Combat Team operations. The JAB consists of an M1A2 Abrams tank hull integrated with a hydraulic bridge launcher system to deploy the Armored Vehicle Launched Bridge (AVLB) Military Load Class 95 Scissor Bridge. The JAB is equipped with the Driver Vision Enhancer – Abrams and the Rear View Sensor Systems described above.

13. The highest level of classification of defense articles, components, and services included in this potential sale is SECRET.

14. If a technologically advanced adversary were to obtain knowledge of the specific hardware and software elements, the information could be used to develop countermeasures that might reduce weapon system effectiveness or be used in the development of a system with similar or advanced capabilities.

15. A determination has been made that the Government of Australia can provide substantially the same degree of protection for the sensitive technology being released as the U.S.

Government. This sale is necessary in furtherance of the U.S. foreign policy and national security objectives outlined in the Policy Justification.

16. All defense articles and services listed in this transmittal are authorized for release and export to the Government of Australia.

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